

# The National Digital Newspaper Program (NDNP)

An NEH/LC Collaborative Program

*Enhancing access to American  
historical newspapers*

Release: September 2006



# NDNP Mission



- Enhance access to all American newspapers
- Improve products of United States Newspaper Program (USNP) using current technologies
- Establish standards and “best practices” for newspaper digital reformatting and access
- Develop geographically-diverse program that benefits all US communities
- Use multi-phased approach for research and scaled development

# Why Newspapers?



- Newspapers = fundamentals of history
- No single U.S. collection
- Enormous corpus = archival and access challenge
- Text-intensive layout
- Digitization of microfilmed corpus economically feasible for otherwise difficult physical material

# What We Know



- Broad user-base, high demand for access
- Newspaper format challenges
- 100 million + frames of newspaper microfilm created
- Historical newspapers do not follow contemporary “layout” rules
  - Automated analysis tools are prone to error

# What We Don't Know



- Economic models for developing and maintaining digital access
- Microfilm analysis - what's worth digitizing (research value, quality, OCR)
- Best practices and standards (digital) for newspaper description and text
  - Several commercial approaches - proprietary, not interoperable
- OCR quality and search access needed for millions of pages - what's necessary?
- Technical issues and costs of repository development and migration

# What will NDNP Produce?



- Web access to
  - National directory of US newspaper holdings (what, when, where) – based on USNP legacy data
  - Millions of page images of historical newspapers digitized primarily from microfilm, with full-text
  - Historical context of newspapers
- Depository of duplicate digitized microfilm at LC

# How?



- Multi-partner, phased program
  - NEH: Funds the program (“We the People” initiative)
  - LC: Aggregates, preserves and serves
  - Awardees: Select and convert
- Phase I – FY04-FY07 (Pilot)
  - 2005 NEH awardees (6 for \$1.9 million) with existing digital collections infrastructure and master microfilm negatives
  - 100,000 pages ea + 100,000 LC pages by 2007 (from 1900-1910)
  - Microfilm reel data for future analysis
  - Incorporate use of open standards and software dev
  - Determine resource needs for production system and future phases

# Newspaper Title Directory



- Re-use of CONSER and Newspaper Union List, created under USNP (maintained by OCLC)
  - 147,000 newspaper titles
  - 900,000 holdings records
- Searchable, Web access to all USNP-collected data, linked to digitized issues when available (and newspaper Web sites when linked through CONSER)



# Historical Context



## Curatorial Input to Repository

- Brief essays for each title digitized
  - Publisher, geography, significant events covered, audience/community, politics
- History of newspaper publishing in each state, effect on state or national events

# Full Text with Page-level Access



- Basic level of access served
- Preserves integrity of primary historical content, text in context
- Minimal metadata and human interaction required
- Economics of large-scale, large-format digitization
- Move ahead with creation of substantial content-base for R&D in search and presentation



# Digital Asset Specifications



- Page Image - grayscale, 400 dpi, from microfilm
  - TIFF 6.0; JPEG 2000 (.jp2); PDF with Hidden Text
- OCR
  - XML – NDNP/ALTO Schema
  - Page-level, uncorrected, column zones with “bounding box” mapping coordinates
- Metadata
  - XML in METS/MODS for digital objects





- Web access - *American Chronicle*
  - Newspaper Title Directory, 1690-present
  - Full-text of content w/in visual newspaper layout (page-level access)
  - Contextual historical material
- Converted content from all awardees
  - Initial time period covered: 1900-1910
  - 250,000 pages at launch



For information, see NDNP Overview at  
<http://www.neh.gov/projects/ndnp.html>

For technical information, see  
<http://www.loc.gov/ndnp/> or contact  
[ndnptech@loc.gov](mailto:ndnptech@loc.gov).